

1.8 WARRANTY
A. Manufacturer: Submit written 2-year warranty from manufacturer, cosigned by installing subcontractor, agreeing to replace system components which fail in materials or workmanship. Failure includes excessive leakage, excessive deflections, deterioration of finish or metal in excess of normal weathering, and defects in accessories, weatherstripping, and other components.

PART 2 - PRODUCTS

2.1 MANUFACTURER

A. All components in the entrance assembly shall be fabricated by Oldcastle Glass Engineered Products.
1. Contact information:
Chasity Dickinson
Oldcastle Glass Engineered Products
P.O. Box 629
803 Airport Road
Terrell, Texas 75160
O: 800-259-7941
E-mail: cdickinson@OldcastleBE.com
A. [Exterior Storefront System: Stock-fabricated, center set, non-thermal; "FG-3000" by Oldcastle BuildingEnvelope as detailed in Drawings.]
1. Mullions: 2-inch sightline by 4-1/2 inches deep.
2. Glazing: Center.
3. Glass: Insulating as specified in Section 08 8000, "Glazing."
B. [Interior storefront system: "FG3000/FG2500" by Oldcastle BuildingEnvelope as detailed in Drawings.]
1. Mullions: 2 inch sightline by 4-1/2 inches deep.
2. Glazing: Center
3. Glass: Single, clear, as specified in Section 08 8000, "Glazing."
C. Finish on Exposed Aluminum: Polyester powder coat.
1. Color (Exterior): Super Stardust Silver.
2. Color (Interior): White.

2.2 DESIGN AND PERFORMANCE REQUIREMENTS

A. Comply with recommendations of AAMA SFM-1, "Aluminum Store Front and Entrance Manual," except where more stringent requirements are specified or required by applicable codes.
B. Design component part and assemblies so complete system complies with applicable code requirements for loads, specified standards and contract documents.
C. Provide complete system with joints, gaps and penetrations sealed and weather tight.
D. Strength: Design system to withstand live loadings and wind loadings as required by governing codes and regulations; limit deflection to L/180 under fully loaded condition.
E. [Water Penetration: No uncontrolled water penetration when tested in accordance with ASTM E331, with no water on exposed interior components.
F. Air Leakage: Maximum 0.06 cfm/ftL, ASTM E283, at differential pressure of 1.57 psf, excluding entrance doors.
G. Thermal Movements:
1. Design for ambient temperature range of 100 degrees F and material temperature range of 160 degrees F without objectionable distortion or stresses in fastenings or joints.
2. Provide for noiseless movement of component parts and materials without buckling, opening at joints, glass breakage, or other detrimental effects.]

2.3 MATERIALS AND COMPONENTS

A. Sealant: Dow Corning.
1. Color: White, to match storefront and approved sample.
B. Glass and Glazing Materials:
1. Glass: As specified and shown on the Drawings.
2. Glazing Materials:
a. General: Materials shall achieve weather, moisture, and air infiltration requirements and comply with requirements of Section 08 8000, "Glazing."
b. Gaskets: Elastomeric, as recommended or provided by system manufacturer.
C. Sealants:
1. General:
a. Use materials and application procedures as recommended by manufacturer. Seal joints, fastener penetrations, and welds as required for watertight installation. Sealant on exposed finished surfaces will not be permitted.
b. Use only non-hardening, non-shrinking, and non-migrating materials.
c. For nonworking metal-to-metal joints within framing members, use small-joint sealant conforming to 803.3 as described in AAMA 800.
2. Perimeter Sealants: As specified in Section 07 9200, "Joint Sealants."
D. Metal Frames: Extruded aluminum as shown on the Drawings, sized and braced as required to support glass.
E. Metal Cladding: Formed aluminum, minimum 16 gage (0.040") thick, with edge concealed in finished construction under glazing stop and at silicone butt joints.
F. Anchorage and fastenings: manufacturer's standard, concealed except as otherwise required; finish heads exposed fasteners match adjacent metal surfaces.
G. Exposed surfaces shall be free of unsightly scuffs and imperfections. The exposed sections shall receive a caustic clean followed by an anodic coating.
2.4 FABRICATION
A. Locate and prepare holes and cutouts to receive hardware before tempering glass.
B. Fabricate storefront framing to accommodate required hardware. Install hardware at the fabrication plant. Remove only as required for final finishing operations, and deliver and installation of the work at the Project.
C. The framing shall be factory fabricated and accurately assemble with uncoated fasteners utilizing extruded splines, clips and/or snap-in features.

PART 3 - EXECUTION

3.1 PREPARATION

A. Separate aluminum and other corrodible metal surfaces from sources of corrosion or electrolytic action.
B. All openings shall be prepared plumb and square by others and shall be of sufficient size to provide clearance at jambs, head, and sill as shown on the Architectural Drawings.

3.2 INSTALLATION

A. Installation, glass and glazing shall be performed by experienced technicians according to the manufacturer's recommendation procedures.
B. Install glass as detailed and in accordance with FGMA standards for indicated frame system; glass shall not touch metal.
1. Apply sealant to uniform and level line, slightly concave, free of air pockets, embedded matter, ridges and sags; tool sealant surface for smooth appearance.
a. Provide sealant at floor, ceiling and intersecting walls at vertical joints; refer to Drawings for additional sealant requirements at butt joints, sills.
2. Remove and replace glass which is broken, chipped, cracked, abraded, stained or damaged during construction period, including natural causes, accidents and vandalism.
3. Set door plumb level and true to line, without warp or rack. Anchor securely in place. Provide minimal clearance from top of glass doors to soffit.
C. When general contractor removes storefront barricade, fully clean all glass/raill surfaces inside and out. Install temporary full height paper covering on inside face of glass. (verify with mail management type and color of acceptable paper).
D. Upon completion of construction, the general contractor shall be responsible for cleaning all anodized aluminum with plain water containing mild detergent, or as recommended by manufacturer. no abrasive.

END OF SECTION

SECTION 08 4226 - ALL-GLASS ENTRANCES

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes: All-glass entrance systems and the following as shown in Drawings:
1. Metal trim, flashings, and similar items in conjunction with all glass entrances.
2. Sealants, joint fillers, and gasketing systems for entrances.
3. Anchors, shims, fasteners, inserts, expansion devices, accessories, support brackets and attachments for all glass entrances.
4. Glass and glazing for all glass entrance doors.
5. Glass door fittings and hardware.
B. Related Requirements:
1. Aluminum-Framed Storefronts: Section 08 4313.
2. Door Hardware: Section 08 7100.
3. Glazing: Section 08 8000.

1.2 ADMINISTRATIVE REQUIREMENTS

A. Pre-installation Conference: Conduct conference at Project site prior to the start of the glass entrance and storefront work and review the installation procedures and coordination with other work. Meeting shall include Contractor, Architect, Owner's Project Manager, all glass entrance and storefront installer, sealant installer, as well as any other subcontractors or material technical service representatives whose work, or products, to be coordinated with the all-glass entrance and storefront work.
B. Coordinate fabrication schedule with construction progress to avoid delaying the Work.

1.3 ACTION SUBMITTALS

A. Shop Drawings: Showing scaled elevations, plans, and sections of the all glass entrance and storefront work. Full scale sections shall be prepared and submitted for details of the assemblies that cannot be shown in the elevations or sections. Include with shop drawings metal thickness of all metal components, glass thicknesses, metal finishes, details of fittings, and all other pertinent information as necessary or requested by the Architect to indicate compliance with the Contract Documents. Details of field connections, anchorage, and their relationship to the work of others shall be clearly indicated for the coordination of the work by other building trades. Details of fastening and sealing methods and product joinery shall be shown. No work shall be fabricated until shop drawings for that work have been approved by the Architect.
B. Product Data: Manufacturer's specifications, installation instructions for each all-glass entrance and storefront product specified.

1.4 INFORMATIONAL SUBMITTALS

A. Design and Shop Drawings: Submit, for information only, copies of structural calculations indicating complete compliance with the specified performance requirements. Calculations shall be prepared, signed and sealed by a Professional Engineer registered in the state [] wherein the work is to be erected.
B. Closeout Submittals:
1. Maintenance Instructions: Submit copies of manufacturer's written instructions for adjustment, operation and maintenance of swinging and sliding doors.
2. Installation Instructions: Installation instructions for glass entrance system components shall be available at jobsite during construction and at completion of work for Architect's reference.

1.6 QUALITY ASSURANCE

A. Manufacturer and Installer Qualifications: Owner selected National Account fabricator and installer.
B. Standards: Comply with the applicable provisions and recommendations of the following standards below, where standards conflict the more stringent shall apply:
1. American Architectural Manufacturers Association (AAMA):
a. AAMA "Aluminum Curtain Wall Design Guide Manual," Volumes 1-9
b. AAMA "Aluminum Store Front and Entrance Design Guide Manual."
c. AAMA 611 "Anodized Architectural Aluminum."
d. AAMA 2603 "Voluntary Performance Requirements and Test Procedures for Pigmented Organic Coatings on Extruded

Aluminum."
e. AAMA 2605 "Specification for Superior Performing Organic Coatings on Architectural Extrusions and Panels".
2. American Institute of Steel Construction (AISC), "Steel Construction Manual," Current Edition.
3. Steel Structures Painting Council (SSPC), "Steel Structures Painting Manual, Vol. 2, Systems and Specifications".
4. Federal Standard 16 CFR 1201, Consumer Product Safety Commission (CPSC), "Safety Standard for Architectural Glazing Materials," as published in the Code of Federal Regulations (CFR). Comply with the applicable requirements of the laws, codes, ordinances and regulations of Federal and Municipal authorities having jurisdiction, wherever requirements conflict the more stringent shall be required. Obtain approvals from all such authorities. As a minimum provide safety glazing complying with ANSI Z97.1 and testing requirements of 16 CFR Part 1201 for Category II materials.
5. Welding Standards: Welding shall be performed by skilled and qualified mechanics. Welding shall be performed in accordance with the applicable provisions of AWS D1.1 "Structural Welding Code - Steel" and AWS D1.2 "Structural Welding Code--Aluminum."

1.7 DELIVERY, STORAGE, AND HANDLING

A. General: Comply with the applicable provisions of AAMA MCWM-1, "Metal Curtain Wall Manual," for the care and handling of all glass entrance and storefront work from shop to site.
B. Packaging of components shall be so selected to protect the components from damage during shipping and handling.
C. Storage on Site:
1. Store all glass entrance and storefront components in a location and in a manner to avoid damage to the components.
2. Stacking shall be done in a way which will prevent bending, excessive pressure, abrasion or other permanent damage of the component and its finished surfaces.
3. Keep handling on site to a minimum.
4. Exercise particular care to avoid damage to finishes of metals.

1.8 FIELD CONDITIONS

A. Field Measurements: Verify dimensions of supporting structure by field measurements before fabrication so that the entrance and storefront work will be accurately designed, fabricated and fitted to the structure. Indicate measurements on shop drawings. Use Contractor's lines and benchmarks as a basis for measurements.
B. Established Dimensions: Where field measurements cannot be made without delaying the Work, establish dimensions and proceed with fabricating entrance and storefront work without field measurements. Coordinate supporting structure construction to ensure that actual dimensions correspond to established dimensions.

1.9 WARRANTY

A. General Warranty: The special warranty specified in this Article shall not deprive the Owner of other rights the Owner may have under other provisions of the Contract Documents and shall be in addition to, and run concurrent with, other warranties made by the Contractor under requirements of the Contract Documents.
B. Special Warranty: Submit a 2 year written warranty, beginning from date of Substantial Completion, and executed by the Contractor, manufacturer and the all glass entrance and storefront installer agreeing to repair or replace components of entrance and storefront systems that develop defects in materials or workmanship within the specified warranty period. Defects include, structural, leaks, seatant failures, deterioration of metals, metal finishes, and other materials beyond normal weathering, failure of operation components, seepage, uncontrolled water leakage, updraft and air leakage, or any other evidence of failure or deterioration of the all glass entrance and storefront work to meet performance requirements.

PART 2 - PRODUCTS

2.1 MANUFACTURER

A. All components in the all-glass entrance assembly shall be fabricated by Oldcastle Glass Engineered Products.
1. Contact information: See Responsibility Matrix Sheet C0-1.

2.2 PERFORMANCE REQUIREMENTS

A. General: Provide all glass entrance systems meeting or exceeding the following performance requirements:
B. Structural Properties:
1. Wind Loads: At exterior locations the all glass entrance work, including glass, shall be designed, fabricated and installed to withstand the inward and outward wind pressures as required by codes indicated on Drawings.
2. Seismic Loads: As required by codes indicated on Drawings.
3. Deflection Limitations: Deflections: Base calculations for the following deflections upon the combination of maximum direct wind loads, building deflections, thermal stresses, and erection tolerances.
a. The deflection of any framing member in a direction normal to the plane of the wall when subjected to the full code required wind loads specified above shall not exceed 1/175 of its clear span or 3/4 inch (19 mm) whichever is less, except limit deflection of glass to 1 inch (25.4 mm).
b. Glass, sealants and interior finishes shall not be included to contribute to framing member strength, stiffness or lateral stability.
4. Dead Loads:
a. Limit deflections of metal members spanning door openings to 1/300. The clearance between the member and an operable door shall be no less than 1/16 inch (1.5 mm).
b. Twisting (rotation) of the horizontals due to the weight of the glass shall not exceed 1 degree, measured between ends and center of each span.
5. Uniform Structural Loads: Satisfactory uniform wind loading tests of each all glass entrance and storefront assembly (each swinging and sliding door) shall have been conducted in accordance with the requirements of ASTM E330. Each assembly shall have been subjected to inward and outward acting uniform loads equal to 1.5 times the inward and outward acting design wind loads specified above under paragraph "wind loads". Satisfactory performance at these loads shall mean no glass or other component breakage, and no component disengagement.
C. Building Frame Movement: Design, fabricate and install all glass entrances and storefronts to withstand building movements including thermal movements, loading deflections, shrinkage, creep and similar movements. Thermal movements shall be as specified above. Building frame deflections, shrinkage, creep and other movements are available from the structural engineer.

2.3 HARDWARE

A. Refer to the Drawings and Section 08 7100 - Door Hardware.

2.6 FABRICATION

A. General:
1. Fabricate the entrances to the designs, shapes, and sizes shown using the materials, and components, specified and shown to produce assemblies which meet or exceed the performance requirements.
2. Glass entrance doors shall be fabricated and factory-assembled by door manufacturer.
3. To the greatest extent possible complete fabrication, assembly, finishing, hardware applications and other work before shipment to Project site. As far as practicable, all additional fitting and assembly work shall be done in a fabrication shop.
B. Provide holes and cutouts in glass to receive hardware, fittings, rails, and accessories before tempering glass. Do not cut, drill, or make other alterations to glass after tempering.
1. Fully temper glass using horizontal (roller-learned) process and fabricate so, when installed, roll-wave distortion is parallel with bottom edge of door or rail.
2. Factory install hardware to greatest extent possible.
C. Metal components of storefronts shall be cut, reinforced, drilled and tapped in strict accordance with the printed door hardware manufacturer's templates and instructions.
D. Joints in Metal Work: All exposed metal work shall be carefully fitted and matched to produce continuity of line and design, with all joints, being accurately fitted for hairline contact and rigidly secured. Where additional rigidity or strength is required to satisfy the performance requirements reinforce entrance components with aluminum or carbon steel shapes, bars, and plates.
E. Exposed Fasteners: Not permitted.
F. Protection of Metals:
1. Wherever dissimilar metals are in contact, except in the case of

be confirmed by the Contractor and/or glass manufacturer. All glass for the size openings shown will be provided in thicknesses such that the probability of breakage at the design "Wind Load" will not exceed 8 lights per 1000 lights (S.F. 2.5) based on a 60 second uniform wind load duration, and reflectance and shading indicated. The glass manufacturer shall provide, on request, substantiating glass breakage data if such data is not otherwise available as manufacturer's published data.

E. Design Modifications:

1. Submit design modifications necessary to meet the performance requirements and field coordination.
2. Variations in details or materials shall not adversely affect the appearance, durability or strength of components.
3. Maintain the general design concept without altering size of members, profiles and alignment.

2.3 MATERIALS

A. Glass: ASTM C 1048, Kind FT (fully tempered), Condition A (uncoated surface), Type I (transparent), tested for surface and edge compression per ASTM C 1048 and for impact strength per 16 CFR 1201 for Category II materials.
1. Product: All glass shall be provided by fabricator of all-glass storefront system.
a. Class 1: Clear.
b. Minimum Thicknesses: 1/2 inch thickness at doors up to height of 8'-0".
2. Exposed Edges: Flat edge (cut edge of glass is flat and surface edges are slightly arised) with polished finish.
B. Aluminum: AA Alloy 6063 and ASTM B 221 (ASTM B 221M), with tempering as required to suit performance requirements and finishes specified.
C. Stainless-Steel:
1. Cladding, Plate, and Flat Bar: ASTM A 666, Type 316
2. Bars and Shapes: ASTM A276, Type 316.

2.4 COMPONENTS

A. Glass Entrances:
1. Provide an extruded aluminum retained, glass and metal frame system fabricated and finished to suit the conditions indicated and specified.
2. System shall be complete with all aluminum framing members, fasteners, anchors, gaskets, washers, glass and glazing components.
3. All aluminum members shall be finished as specified.
B. Rails: Stainless-steel-clad aluminum.
1. Adhesively laminate mechanically fastened metal members, returning cladding around protrusions to protect exposed edges.
2. Sizes:
a. Bottom Rail: 10 inches high by minimum 7 inch depth of glass retention inset rail.
b. Top Rail: 4 inches high.
3. Affix rails to rails with dry-glazed assembly.
C. Anchors: Stainless Steel Buffer End Cap Pins and Plugs, Friction coupling assembly.
D. Fasteners: Stainless Steel.
2. Anchors and Fastener Metal Alloy Types, Designations and Standards: Alloys as selected by fabricator to prevent corrosion resistance with the components fastened. Do not use self-drilling, self-tapping type fasteners.
D. Spacers, Setting Blocks, Gaskets: Permanent, non-migrating types of material and in hardness recommended by all glass storefront and entrance manufacturer and complying with the performance requirements.
E. Slip and Separator Gaskets:
1. Bolted slip-joints: Non-metallic, low friction material bearing temperature and moisture resistances and low abrasion properties as required to suit performance criteria.
2. Non-bolted slip-joints: Non-corrosive, non-toxic impregnated felt, or butyl, tape with a pressure sensitive adhesive on one surface which is formulated for proper adhesion to metals shown; gasket shall bear temperature and moisture resistance properties as required to suit performance criteria, thickness and width as required.
F. Adhesives and Epoxies: As required for laminating cladding to base components.
G. Structural Silicone Sealant: As specified in 07 9200 - Joint Sealants.

2.5 HARDWARE

A. Refer to the Drawings and Section 08 7100 - Door Hardware.

2.6 FABRICATION

A. General:
1. Fabricate the entrances to the designs, shapes, and sizes shown using the materials, and components, specified and shown to produce assemblies which meet or exceed the performance requirements.
2. Glass entrance doors shall be fabricated and factory-assembled by door manufacturer.
3. To the greatest extent possible complete fabrication, assembly, finishing, hardware applications and other work before shipment to Project site. As far as practicable, all additional fitting and assembly work shall be done in a fabrication shop.
B. Provide holes and cutouts in glass to receive hardware, fittings, rails, and accessories before tempering glass. Do not cut, drill, or make other alterations to glass after tempering.
1. Fully temper glass using horizontal (roller-learned) process and fabricate so, when installed, roll-wave distortion is parallel with bottom edge of door or rail.
2. Factory install hardware to greatest extent possible.
C. Metal components of storefronts shall be cut, reinforced, drilled and tapped in strict accordance with the printed door hardware manufacturer's templates and instructions.
D. Joints in Metal Work: All exposed metal work shall be carefully fitted and matched to produce continuity of line and design, with all joints, being accurately fitted for hairline contact and rigidly secured. Where additional rigidity or strength is required to satisfy the performance requirements reinforce entrance components with aluminum or carbon steel shapes, bars, and plates.
E. Exposed Fasteners: Not permitted.
F. Protection of Metals:
1. Wherever dissimilar metals are in contact, except in the case of

aluminum in contact with galvanized steel, zinc, separate such surfaces with a coating of zinc rich primer, bituminous paint, or separation gaskets as the condition requires.
2. Wherever aluminum comes in contact with concrete surfaces separate such surfaces with a coating of zinc rich primer, bituminous paint, or separation gaskets as the condition requires.

2.7 FINISHES

A. General:
1. Comply with NAAMM's "Metal Finishes Manual for Architectural and Metal Products" for recommendations for applying and designating finishes.
2. Protect finish with factory applied adhesive backed paper covering.
B. Door and Frame: Power coat, "Crystal White" color. Coordinate with Section 08 4113 - Aluminum-Framed Storefronts for color match.

PART 3 - EXECUTION

3.1 PREPARATION

A. Coordinate entrance and storefront work with the work of other Sections and provide items to be placed during the installation of other work at the proper time to avoid delays in the work.
B. Place such items, including concealed overhead framing, accurately in relation to the final location of entrance and storefront components.

3.2 EXAMINATION

A. Examine the substrates, adjoining construction, and conditions under which the Work is to be installed.
B. Do not proceed with the Work until unsatisfactory conditions have been corrected. Before beginning installation of the storefront work examine all parts of the existing building structural frame, the existing building cladding intended to support the storefront work. No work shall proceed until all dimensions, or conditions, exist which will provide proper execution of the entrance and storefront work providing specified tolerances. Use Contractor's check lines and bench marks as a basis of measurements.
3.3 INSTALLATION
A. General: Comply with manufacturer's written instructions for protecting, handling, and installing entrance and storefront systems. Do not install damaged components. Fit frame joints to produce hairline joints free of burrs and distortion. Rigidly secure non-movement joints. Seal joints with waterstop.
1. General trim component parts of the entrance and storefront work during erection only with the approval of the manufacturer or fabricator, and in accordance with his recommendations. Restore finish completely to protect material and remove all evidence of cutting and trimming. Remove and replace members where cutting and trimming has impaired strength or appearance, as directed by Architect.
2. Set components within the erection tolerances with uniform joints where shown. Place components on aluminum or stainless steel shims and fasten to supporting substrates using bolts and similar fasteners.
3. Do not erect components which are warped, deformed, bowed, defaced or otherwise damaged as to impair strength. Remove and replace members damaged in the process of erection.
B. Entrance Doors: Doors shall be securely anchored in place to a straight, plumb and level condition, without distortion. Adjust doors to operate smoothly, without binding, with hardware functioning properly. Hardware movement shall be field tested and final adjustment, and lubrication, made for proper operation and performance of doors.
1. Set, seal, and grout floor closer cases to suit hardware and substrate indicated.
C. Maintain uniform clearances between adjacent components.
D. Install silicone glazing sealant to comply with requirements of Section 08 8000 - Glazing.

3.4 ERECTION TOLERANCES

A. The entrance and storefront systems shall be fabricated and erected to accommodate the dimensional tolerances of the structural frame and surrounding cladding, while providing the following as installed tolerances:
1. Variation from theoretical calculated position as located in plan or elevation in relation to established floors lines, column lines and other fixed elements of the structure, including variations from plumb, level, straight and member size: Plus or minus 1/4 inch maximum in any 20'-0" run, column-to-column bay, or floor-to-floor height.
2. Alignment: Where surfaces abut in line, limit offset from true alignment to 1/16 inch (1.5 mm). Where surfaces meet at corners, limit offset from true alignment to 1/16 inch (1.5 mm).
3. Variation from angle, or plumb, shown: Plus or minus 1/8 inch maximum in 10'-0" run or story height, non-cumulative.
4. Variation from slope, or level, shown: Plus or minus 1/8 inch maximum in any 20'-0" run or column-to-column bay, non-cumulative.

3.5 ANCHORAGE

A. Anchorage of the storefront work to the structure and surrounding cladding shall be in accordance with the accepted shop drawings.

3.6 WELDING

A. Weld with electrodes and by methods recommended by manufacturer of material being welded, and in accordance with AWS D1.1 for concealed steel members. Use only methods which will avoid distortion and discoloration of exposed faces.
B. Welds and adjacent metal areas shall be thoroughly cleaned and coated with a single coat of bituminous paint.

3.7 REMOVAL OF DEBRIS

A. All debris caused by, or incidental to, the erection of the entrance and storefront work shall be removed from the site and disposed of legally.

3.8 CLEANING

A. Clean metal surfaces promptly after installation, exercising care to avoid damage to factory finished exposed surfaces.
B. Wash glass on both faces not more than 4 days prior to date scheduled for inspections that establish date of Substantial Completion. Wash glass as recommended by glass manufacturer. Remove excess glazing and sealant compounds, dirt, and other substances.
C. Immediately remove any deleterious material from surfaces of aluminum.

3.9 PROTECTION

A. Institute protective measures required throughout the remainder of the construction period to ensure that architectural metal entrance work will be without damage or deterioration, other than normal weathering, at time of acceptance.

END OF SECTION

SECTION 08 71 00 - DOOR HARDWARE

PART 1 - GENERAL

1.1 SUMMARY

E. Section Includes: Provide hardware for hollow metal and wood doors.
1. Provide cylinders for doors fabricated by hardware manufacturer.
2. Hardware Schedule: Contractor hired Architectural Hardware Consultant (AHC) to develop hardware Schedule based on requirements in Contract Documents, codes, regulations, and input from Owner and Architect.
B. Related Section: Section 08 71 15 - Emergency Door Operators.
1.2 REFERENCES
A. ANSI A156 and A115M Series Door and Frame Preparation Standards.
B. AIA A156 Series 156.20: Standards for various hardware items.
C. National Fire Protection Association: NFPA 80, Fire Doors and Windows.

1.3 ADMINISTRATIVE REQUIREMENTS

A. Hardware Schedule: Contractor to develop Hardware Schedule based on requirements in Contract Documents with Architectural Hardware Consultant (AHC) with not less than five years successful experience in scheduling hardware.
1. AHC may be independent or may be employed by manufacturer or supplier.
2. List door numbers, locations, types of doors and frames, hardware group numbers, key symbols, and name of each item and its manufacturer, catalog number, material, and finish.
3. Submit in sufficient time for Architect's review and for supplier to place order with manufacturers in order to meet Project Schedule.
4. Do not order hardware until Hardware Schedule has been reviewed and returned.
5. Review of Hardware Schedule shall not be construed as certifying that the list is complete.
B. Coordination: Coordinate hardware installation with doors including but not necessarily limited to following.
1. Coordinate hardware installation with hollow metal doors and frames installation in Section 08 11 10.
2. Coordinate hardware installation with wood doors installation in Section 08 14 00.
C. Pre-Installation Meeting: Convene pre-installation meeting prior to commencing work of this section. Include persons involved with installation of doors, frames, and hardware.
D. Templates: Furnish templates of physical hardware to door and frame manufacturers as required to ensure proper preparation for hardware. Where paper templates cannot be used effectively, furnish physical templates.
1.4 SUBMITTALS
A. Product Data: Submit catalog cuts for each type of hardware clearly marked to indicate hardware type to be provided, style, finish, and options.
1. Supply templates to door and frame manufacturers for sizing and locations of cut-outs for hardware.
B. Shop Drawings: Indicate locations and mounting heights of hardware.
1. Electrical Hardware: Submit wiring diagrams for electrified door hardware. Complete and detail system operation and elevation diagram specially developed for each opening requiring electrified hardware except where only magnetic hold-opens or door position switches are specified. Provide diagrams with hardware schedule submittal for approval. Provide detailed wiring diagrams with hardware delivery to jobsite.
C. Samples: Indicate required style and finish of exposed door hardware.
D. Keying Schedule: Coordinate directly with Owner's Representative.
E. AHC Certification: Submit by AHC indicating hardware complies with applicable codes and Contract Documents.
F. Closeout Submittal: Record actual locations of installed cylinders and master key codes on Record Documents.
G. Maintenance Materials: Submit manufacturer's parts list and maintenance instructions for each type of hardware supplied and necessary wrenches and tools required for proper maintenance of hardware.

1.5 QUALITY ASSURANCE

A. Supplier Qualifications: Recognized builder's hardware supplier with minimum five years successful experience in scheduling and furnishing hardware.
1. Provide services of Architectural Hardware Consultant to supervise hardware supply.
1.6 DELIVERY, STORAGE, AND HANDLING
A. Deliver hardware to factory, shop, or mill of subcontractors and manufacturers requiring it or directly to the Project site as required.
B. Deliver hardware in manufacturer's original packages, marked for intended opening and use.
C. Pack complete with necessary screws, bolts, keys, instructions, and installation template, if necessary, for spotting mortising tools.
D. Upon delivery, furnish complete list of hardware for checking, clearly marked to correspond with marking on package.
1. Review list for completeness and accuracy.
1.7 WARRANTY
A. Correction of Work Period: Extend to not less than two years. Repair or replace hardware that fails in materials or workmanship or which does not perform as required.

NEW STORE



CAPAC, INC.
CORPORATE ARCHITECTURE
HARRISON STREET
FRANCO, CA 94105

REPS. I.D.:

0000054156

STORE NUMBER:

4458

STORE LOCATION:

VINELAND
8231 VINELAND AVENUE
SUITE 2151
ORLANDO, FLORIDA 32821

DESIGN TYPE: P3

GENERATION: 17Q12

PROTOTYPE DATE: 07/18/16

OPENING: 2017

CONSULTANT INFO:

PROFESSIONAL STAMP:

ARCHITECT INFO:

B | R | R
architecture
ARCHITECT OF RECORD: BRB ARCHITECTURE, INC.
6730 ANTIOSH PLAZA, SUITE 200, HOUSTON, KANSAS 67404

ISSUE TYPE:

PERMIT/ID: 04/07/17

REVISIONS:

DRAWN BY: EE

A/E JOB NUMBER: 65013011

TITLE SHEET:

SPECIFICATIONS

SHEET NUMBER:

A13-9